

Serial Number 10/642,892
Calvesio et al.

Attorney Docket RA-5621
Office Action Response filed July 27, 2005

Remarks

In the Office Action dated 4/27/3005 ("Office Action"), Claims 1-32 were rejected. Claims 1, 10, and 23 were amended in the foregoing amendment, and the remaining Claims remain unchanged. In view of the amendments to the Claims and the arguments set forth below, it is respectfully submitted that all Claims are currently in condition for allowance, and a Notice of Allowance is respectfully requested.

Arguments

1. Claims 1, 2, and 5-22 were rejected under 35 USC §101 because the claimed invention is said to be directed to non-statutory subject matter. In particular, these Claims are said to fail the first part of a two-prong test because the invention is not be within the technological arts.

Claim 1, as currently presented, recites:

A method of using a data processing system for processing travelers crossing international borders, comprising:

- a) prior to the time of travel, employing the data processing system to enroll a traveler to utilize an automated check-in process; and
- b) at the time of travel, utilizing the automated check-in process to complete activities necessary to enable an international border crossing. (Claim 1, emphasis added.)

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Thus, Applicants' Claim 1 is claiming use of a data processing system to enroll a traveler in an automated check-in process, and then utilizing this automated check-in process at the time of travel to enable an international border crossing.

In regards to the term "automated check-in process", Applicants' Specification describes how this is a process that does not require human intervention. (Applicants' Specification page 8, lines 12-13.) Use of this automated, versus a manual, process has many advantages, including the reduction of costs to the transportation industry, law enforcement, and other government agencies, as well as saving time for the traveler. It also allows security resources to be concentrated on those travelers that are associated with an unknown degree of risk, instead of wasting those resources on travelers that are known to present a relatively small risk. (Applicants' Specification page 8 lines 5-20.)

Applicants' use of the term "automated" to mean "without human intervention" conforms to its ordinary meaning. For instance, a definition of "automated" that appears in an on-line dictionary located at URL <http://www.sstn.co.uk/glossary.html> is as follows:

"'Automated' refers to a process which may once have been performed manually but has been altered in some way which allows a machine or computer to either wholly or partially manipulate the process to save time."

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A similar definition appears at URL

http://www.bced.gov.bc.ca/irp/tech_ed/apf.htm as follows:

"Techniques of self-regulation and self-control for systems that reduce the amount of human supervision required for a machine or process."

Similarly, *The American Heritage Dictionary*, second college addition, 1982, Houghton Mifflin Company, defines automatic as follows:

"Acting or operating in a manner essentially independent of external influence of control."

This same dictionary then defines "automation" as "the automatic operation or control of a process, equipment" and "automate" as "to convert to automation".

From the foregoing, it may be appreciated that Applicants' definition and use of "automated" corresponds to the common, well-understood meaning of the word. Moreover, in using this term, Applicants' Claim 1 is not claiming non-statutory subject matter directed to a method of performing mental steps, but instead is directed to using a data processing system, as well as the utilization of an automated process, to implement a method of crossing an international border. Applicants' Specification is very clear about all of the benefits this method provides as compared to a manual process for crossing international borders.

Next, the Examiner's specific assertions regarding this rejection are considered. The Examiner states that the limitation of "employing the data processing system to enroll a traveler" is "merely a trivial use of a data processor", since the "data (enrollment) that is being collected by the processor

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is not further used in the claim, and is not further manipulated in the process."

Applicants' Representative is not aware of any requirements that necessitate recitation of such elements in order to satisfy 35 USC §101. Furthermore, the meaning of a "trivial use of a data processing system" is not understood.

Further to the foregoing point, the Examiner suggests describing the data that is being collected at the time of enrollment. The Specification describes many types of data that may be collected, and the scope of the independent Claim should not be limited by reciting a data type.

Next, the Examiner states that Claim 1 only recites an abstract idea, since the check-in process does not apply or use advanced technological arts because all of the recited steps can be performed in the mind. That is not true. The step of utilizing an automated check-in process to complete activities necessary to enable an international border crossing cannot, by definition, be performed in the mind. As already discussed, the term "automated" is defined in Applicants' Specification to mean "without human intervention". This conforms to the common meaning of this term, and most certainly by its very definition, is not being performed in the mind of the user or by pen and paper. Moreover, the step of employing the data processing system to enroll a traveler is not a step being performed in the mind of the user. Claim 1 describes a process that cannot be performed in the mind, and provides many improvements to an existing manual process, as described in Applicants' Specification. Claim 1 therefore describes a process that yields advancements in the technological arts,

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and meets the requirements of 35 USC §101.

The Examiner next states that the word "automated" is only a nominal recitation of the term, and the claims do not recite any structure that lends weight to how the check-in process is automated. Applicants' Representative is not aware of any requirement that necessitates that a method claim recites structure of the type specified by the Examiner. In fact, as is known in the art, automation may be the result of use of hardware, software, a mechanical mechanism, some combination thereof, or other means, and there is no known requirement to limit the scope of a method Claim by reciting these limitations.

Finally, the Examiner states that "'automated' merely means that it is done without further instruction, it does not require the use of a computer". This statement is not understood. It appears that the Examiner is implying that addition of a limitation regarding the use of a computer would obviate the rejection. However, a "data processing system" is referenced in both the preamble and step a.), and the Examiner never-the-less states the Claim is non-statutory. If this rejection is maintained, clarification of this assertion is therefore requested.

To summarize, the Examiner appears to be basing this rejection on the fact that all of the recited steps can be performed in the mind. However, the specific claim language makes clear that the steps are not being performed in the mind, but rather are performed by a data processing system (step a.) and involve an automated process (step b.). Thus, the scope of Claim 1 is not broad enough

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to encompass a method performed solely using mental steps, and this rejection is therefore improper, and should be withdrawn.

2. Claims 1-31 were rejected under 35 USC §102(b) as being anticipated by U.S. Patent No. 6,085,976 to Sehr. This rejection is respectfully traversed.

As described in detail in the response filed January 24, 2005 ("Previous Response"), Applicants' system and method relates to an invention that automates procedures that are typically required to accomplish an international border crossing so that on a day of travel, a traveler need not interact with a border agent or some other security personnel. This saves a significant amount of time.

One of the most important procedures that are performed when a traveler seeks to cross an international border involves verifying the traveler's identity. This typically requires a manual step of reviewing a person's travel documents, then verifying that the document carrier is the person described by those papers. Visual inspection alone may be used for this purpose, as by comparing the appearance of the traveler with a passport photograph. If this initial comparison is inconclusive, the official conducting the verification may request additional photo-identification documents such as a driver's license. In addition, the official may conduct an inquiry to ascertain nationality, employment and/or residence status, and so on, to verify the identification of the traveler.

The type of manual interview and/or inspection process discussed above is important for several reasons. First, because a passport photograph may be

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up to ten years old, an inspector may need to request additional information from the traveler, which may include a more recent photo. If doubts still exist about the identity of the document bearer, additional information may be obtained via the interview process. Additionally, a trained inspector may be able to determine whether documents are counterfeit, or if any other concerns exist regarding the status of the prospective traveler.

The type of manual process discussed above is time-consuming. However, this process cannot be practically replaced by automated document readers located, for example, within an airport terminal. This is because some mechanism is needed to ensure that the person currently possessing the documents is the same individual identified by those papers, thus preventing the use of lost or stolen documents by another person. Moreover, it may be noted that this type of verification process cannot be practically performed solely by automated means that obtains a photograph of a traveler, then compares that photograph to one contained in a passport. This is because a passport photograph, which may be as much as ten years old, will often not match the current appearance of the traveler, who may have changed in appearance considerably since the time the photograph was taken. Thus, an automated comparison between scanned photographs will produce an inordinate amount of false negatives, and in some cases, may even result in false positives. To prevent this, when systems for comparing multiple photographs are used to verify identity, some type of manual inspection means is also employed as the primary means of verification, particularly where international border crossings are

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concerned.

As may be appreciated from the foregoing discussion, some type of manual screening process is necessary to verify identification of travelers crossing international borders. Generally, this process is performed on the day of travel, for example at a customs station. However, because the procedures may be time-consuming, this may significantly increase wait times. The current invention provides a mechanism that addresses these considerations. According to the invention, identification verification is performed before the day of travel. The prospective traveler proceeds to an enrollment office where an enrollment official performs a manual visual identification, and, if necessary, an interview. After the traveler's identity has been verified, unique identification indicia is collected from the user. This may involve collecting one or more biometric samples such as fingerprints, iris scans, facial scans, and the like. (Applicants' Specification page 5 lines 4-7.) This information is recorded along with other user information such as a passport photo. At this time, checks may be initiated to determine whether the individual poses any type of security or other risk. If not, the traveler is authorized to utilize a completely automated check-in process that does not require any human intervention.

According to this check-in process, on the day of travel, the user employs an automated kiosk that collects biometric data from the traveler, and compares this information against that previously stored by the enrollment officials. If a match occurs and the traveler has not been disqualified for automated processing because of any special conditions, the traveler is allowed to by-pass

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the manual screening process generally required for an international border crossing. This saves the traveler a significant amount of time, and allows resources to be concentrated on those travelers considered to statistically pose a higher security threat. (Specification page 7 line 17 through page 8 line 4.)

Next, Sehr is considered. The Examiner cites this reference as disclosing a procedure whereby the passengers enroll prior to check-in to obtain a smart card that carries information pertaining to international travel. This smart card is said to enable an automated check-in process.

Sehr disclosed a multi-application card such as a smart card that stores travel information as well as monetary value that can be used for electronic payment. Travel information may include the equivalent of an electronic ticket, use rights for a transportation carrier, considerations for travel-related services, security codes, and so on. During international travel, this type of card may be employed as follows:

"[t]he cardholder's identity can be verified at the passenger station by a carrier/travel representative, including via selected information stored in the passenger card....authorized personnel can also verify the picture imprinted onto the card, as well as the passenger's demographics information stored onto the card." (Column 23 lines 21-22 and 32-34, emphasis added.)

Thus, the Sehr system requires that a carrier representative manually perform identification verification. While Sehr does state that the system's control module can capture the passenger's physical appearance, which may then be compared to a picture stored on the card, this process is performed in addition to, rather than instead of, the manual verification process. (Column 23

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lines 21-23 and line 32.) As noted above, security operations cannot rely solely on the type of verification process that compares a previously stored photo to a photo taken on the day of travel, since that type of process will generally produce a very large number of false negatives or positives, making this approach impractical.

Sehr also states that in addition to manual verification, the traveler may be required to provide a security code that will be matched to a code stored on the card. (Column 23 lines 38-41.) Again, this mechanism cannot be relied upon as the sole means of identification verification since code information can be lost or stolen along with the card, and would not be sufficiently protective to secure international borders. Thus, in Sehr, this additional check is only performed in addition to other manual procedures (Column 23 lines 21-23.)

To summarize, Sehr does not teach any mechanism that provides a completely automated check-in process for crossing an international border.

Next, the language of the Claims is considered. Claim 1, step b.), describes an automated process that enables an international border crossing. Applicants' Specification describes that if a traveler is authorized to use the automated process according to the current invention, that traveler may complete the border crossing without interacting with a human. This is shown in the steps of Applicants' Figure 5, and is further described in Figure 6, steps 608 – 622. This is not the case with the Sehr system and method, which requires the use of human intervention along with use of some automated processing mechanisms. Thus, Sehr does not provide the same benefits of Applicants' system and

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method, which completely eliminate the requirement of human intervention for qualified travelers. This reduces travel time, and allows security resources to be concentrated on those travelers that pose a higher risk.

In regards to this limitation, the Examiner states that Applicants' use of the term "automated" does not necessarily mean that the whole process is done without human intervention. Therefore, to clarify this distinction between Applicants' Claim 1 and any teaching of Sehr, Claim 1 has been amended above to recite "...utilizing the automated check-in process to complete activities necessary to enable an international border crossing without aid of human intervention", (Claim 1 step b, emphasis added). With this change, Claim 1 is allowable over Sehr, and this rejection should therefore be withdrawn.

Claims 2 – 22 depend from Claim 1 and are allowable over Sehr for at least reasons that are similar to those that are described above regarding Claim 1.

Claim 23 is amended above in a manner similar to that described in regards to Claim 1. In particular, Claim 23 now describes an "automated check-in procedure that automatically initiates activities necessary to allow the traveler to cross the international border without human intervention". With this change, Claim 23 is now allowable over Sehr, and this rejection should be withdrawn.

Claims 24 – 30 depend from Claim 23, and are likewise allowable over Sehr for at least reasons that are similar to those described above in reference to Claim 23.

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Claim 31 describes "automated user interface means for allowing the user to participate in the automated travel process that completes all activities required for entry into a country without the need for human intervention". For reasons similar to those described above, this Claim is allowable over Sehr. Claim 32 depends from Claim 31 and is likewise allowable over this reference for at least the reasons described above in reference to Claims 1, 23, and 31.

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Conclusion

In the Office Action dated 4/27/3005, Claims 1-32 were rejected. Claims 1, 10, and 23 are amended above, and the remaining Claims remain unchanged. In view of the amendments to the Claims and the arguments set forth herein, it is respectfully submitted that all Claims are currently in condition for allowance, and a Notice of Allowance is respectfully requested. If the Examiner has questions or concerns, a call to the undersigned is encouraged and welcomed.

Respectfully submitted,

Beth L. McMahon 7/27/2005

Beth L. McMahon
Attorney for Applicants
Reg. No. 41,987
Telephone No. 651-635-7893

Unisys Corporation
M.S. 4773
P.O. Box 64942
St. Paul, MN 55164-0942